

REMARKS

Claims 1-53 are pending. Claims 1-18 and 27-53 are withdrawn from consideration. Claims 21-23 are objected to. Claims 19-26 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter, and under 35 U.S.C. § 112, second paragraph, for indefiniteness. Claims 19-21 are rejected 35 U.S.C. § 102(b) for anticipation by U.S. Patent No. 6,077,693, while claim 22 is rejected under 35 U.S.C. § 102(e) for anticipation by WO 02/086094. Finally, claim 19 is rejected for obviousness-type double patenting over claim 1 of U.S. Patent No. 6,566,501. The Office also objects to the specification. By this reply, Applicants amend the specification, cancel claim 23, amend claims 19, 21 22, and 24-26, and address each of the Office's objections and rejections.

Support for the Amendment

Support for the amendment to present claims 19, 21, 22, and 24-26 is found in prior claims 19-26 and in the specification at, e.g., page 6, lines 7-11, and page 6, line 20, through page 7, line 1. No new matter is added by the amendment.

Objections to the Specification

The Office objects to the specification, stating that “sequences were set forth [in the specification] that lack sequence identifiers” (Office Action, pp. 2-3). In response, Applicants have amended the specification to include sequence identifiers in satisfaction of the requirements of 37 C.F.R. § 1.821 through 1.825. Applicants respectfully request that this objection be withdrawn.

Claim Objections

The Office objects to claims 21-23 on the ground that these claims lack sequence identifiers, and to claim 23 for a typographical error. Applicants have cancelled claim 23 and amended claims 21 and 22 to include sequence identifiers. This objection can now be withdrawn.

Rejection under 35 U.S.C. § 101

The Office rejects claims 19-26 under 35 U.S.C. § 101, stating that “the claimed invention is directed to non-statutory subject matter...It is suggested that Applicant claim the peptides as isolated peptides” (Office Action, p. 4). As suggested by the Office, Applicants have amended present claim 19 to recite an “isolated peptide fragment.” This rejection can now be withdrawn.

Rejection under 35 U.S.C. § 112, second paragraph

The Office rejects claims 19-26 under 35 U.S.C. § 112, second paragraph, for indefiniteness, stating that “[c]laim 19 recites a ‘peptide fragment of a peptide having SEQ ID NO: 1’. It is unclear if the fragment is SEQ ID NO: 1, or if the fragment is part of the peptide comprising SEQ ID NO: 1” (Office Action, p. 3). Applicants have amended claim 19 so that it now recites an isolated peptide fragment that includes, *inter alia*, the amino acid sequence set forth in SEQ ID NO: 5, which corresponds to amino acids residues 165-180 of SEQ ID NO: 1, and lacks one or more of the amino (N)-terminal or carboxy (C)-terminal amino acid residues set

forth in SEQ ID NO: 1. Thus, the metes and bounds of the term “fragment” are no longer unclear. Applicants respectfully request that this rejection be withdrawn.

Rejections under 35 U.S.C. § 102

Rejection under 35 U.S.C. § 102(b)

The Office rejects claims 19-21 under 35 U.S.C. § 102(b) for anticipation by U.S. Patent No. 6,077,693. The Office states that “US 6,077,693 teaches SEQ ID NO: 1” (Office Action, p. 4). As is discussed above, Applicants have amended independent claim 19 to recite an isolated peptide fragment that includes the amino acid sequence set forth in SEQ ID NO: 5, lacks one or more of the amino (N)-terminal or carboxy (C)-terminal amino acid residues set forth in SEQ ID NO: 1, and is capable of promoting transcription of tumor necrosis factor-alpha (TNF- α) by binding to a region of the TNF- α promoter. U.S. Patent No. 6,077,693 fails to teach or suggest the isolated peptide fragments recited by present independent claim 19, and claims 20-22 and 24-26 dependent therefrom. Applicants respectfully request that this rejection be withdrawn.

Rejection under 35 U.S.C. § 102(e)

The Office rejects claim 22 under 35 U.S.C. § 102(e) for anticipation by WO 02/086094, stating that “WO02086094 teaches sequence PQTWLEKGMAAGSPF, which is amino acids 449-463 of SEQ ID NO: 18...PQTWLEKGMAAGSPF is a naturally occurring allelic variant [of SEQ ID NO:5]” (Office Action, p. 6). Applicants have amended present claim 22, which is now directed to a peptide fragment that has the amino acid sequence set forth in SEQ ID NO: 3. WO 02/086094 fails to teach or suggest a peptide fragment having this amino acid sequence. Thus,

WO 02/086094 fails to teach or suggest all of the limitations of present claim 22. Accordingly, this rejection can now be withdrawn.

Obviousness-Type Double-Patenting Rejection

Claim 19 is rejected for obviousness-type double patenting over claim 1 of U.S. Patent No. 6,566,501. Claim 19 has been amended to recite an isolated peptide fragment that, *inter alia*, includes the amino acid sequence set forth in SEQ ID NO: 5, which corresponds to amino acids residues 165-180 of SEQ ID NO: 1, and lacks one or more of the amino (N)-terminal or carboxy (C)-terminal amino acid residues set forth in SEQ ID NO: 1. Claim 1 of U.S. Patent No. 6,566,501 is directed to an isolated polypeptide that includes amino acids 1-228 of SEQ ID NO: 1 (i.e., the full-length LITAF polypeptide).¹ Claim 1 of U.S. Patent No. 6,566,501 does not suggest or make obvious the LITAF peptide fragments recited in present claims 19-22 and 24-26. This rejection can now be withdrawn.

¹ Applicants note that the sequence set forth in SEQ ID NO: 1 of U.S. Patent No. 6,566,501 is the same sequence set forth in SEQ ID NO: 1 of the present application.

CONCLUSION

In view of the above remarks, Applicants respectfully submit that the claims are in condition for allowance, and such action is respectfully requested.

Enclosed is a Petition to extend the period for replying to the Office Action for one month, to and including July 26, 2007, and a check for the fee required under 37 C.F.R. § 1.17(a).

If there are any additional charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

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